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PATENT  
Customer No. 22,852  
Attorney Docket No. 4329.3156

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: )  
KOUICHI ICHIMURA ET AL. )  
Application No.: 10/676,160 ) Group Art Unit: 2828  
Filed: October 2, 2003 ) Examiner: Unknown  
For: QUANTUM COMMUNICATION ) Confirmation No.: 6698  
APPARATUS AND QUANTUM )  
COMMUNICATION METHOD )

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)**

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), applicants bring to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits for the above-referenced application.

Copies of the listed documents are attached.

Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached form.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the

documents as prior art against any claim in the application and applicants determine that the cited documents do not constitute "prior art" under United States law, applicants reserve the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

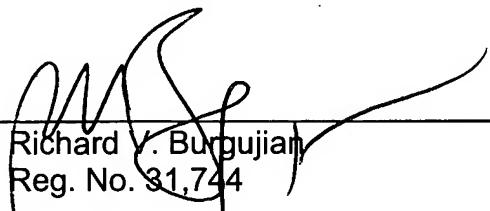
Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: 9/23/04

By: 

Richard V. Burgujian  
Reg. No. 31,744

## INFORMATION DISCLOSURE CITATION

|                  |                 |   |            |
|------------------|-----------------|---|------------|
| Atty. Docket No. | 4329.3156       | Appln. No.                                    | 10/676,160 |
| Applicant        | Ichimura et al. | SEP 23 2004<br>U.S. PATENT & TRADEMARK OFFICE |            |
| Filing Date      | October 2, 2003 | Group:  | 2828       |

## U.S. PATENT DOCUMENTS

| Examiner Initial* | Document Number | Issue Date | Name | Class | Sub Class | Filing Date If Appropriate |
|-------------------|-----------------|------------|------|-------|-----------|----------------------------|
|                   |                 |            |      |       |           |                            |
|                   |                 |            |      |       |           |                            |
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|                   |                 |            |      |       |           |                            |
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## FOREIGN PATENT DOCUMENTS

|  | Document Number | Publication Date | Country | Class | Sub Class | Translation Yes or No |
|--|-----------------|------------------|---------|-------|-----------|-----------------------|
|  |                 |                  |         |       |           |                       |
|  |                 |                  |         |       |           |                       |
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|  |                 |                  |         |       |           |                       |
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|  |                 |                  |         |       |           |                       |

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

|  |   |
|--|---|
|  | Bennett et al., "Quantum Cryptography," Scientific American (October 1992), pp. 50-57                       |
|  | Ekert, "Quantum Cryptography Based on Bell's Theorem," Physical Review Letters (August 5, 1991), 67:661-663 |
|  | Furusawa et al., "Unconditional Quantum Teleportation," Science (October 23, 1998), 282:706-709             |
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|--|---|
| Examiner   | Date Considered   |
| <p>*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p> |   |
| Form PTO 1449  | Patent and Trademark Office - U.S. Department of Commerce |